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| 10/505,440 | 08/24/2004 | Eberhard Ammermann | 3165-107 | 2309 |

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ROTHWELL, FIGG, ERNST & MANBECK, P.C.
1425 K STREET, N.W.
SUITE 800
WASHINGTON, DC 20005

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| EXAMINER |
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PURDY, KYLE A

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| ART UNIT | PAPER NUMBER |
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1611

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12/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary

Application No.

10/505,440

Applicant(s)

AMMERMANN ET AL.

Examiner

Kyle Purdy

Art Unit

1611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/24/209.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 8, 9 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 8, 9, 12 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 11, 14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Application

1. The Examiner acknowledges receipt of the amendments filed on 08/24/2009 wherein claims 1 and 2 have been amended, claim 7 has been cancelled and claim 15 is newly added.

2. Claims 1, 2, 11, 14 and 15 are presented for examination on the merits. The following rejections are made.

Response to Applicants' Arguments

3. Applicants arguments filed 08/24/2009 regarding the objection of claim 1 made by the Examiner have been fully considered and they are found persuasive. This objection has been overcome by cancellation of the claims

4. Applicants arguments filed 08/24/2009 regarding the rejection of claim 7 made by the Examiner under 35 USC 103(a) over Wachendorff et al. (US 6787567) have been fully considered and they are found persuasive. This rejection has been overcome by cancellation of the claims

Applicants arguments filed 08/24/2009 regarding the rejection of claims , 2, 11 and 14 made by the Examiner under 35 USC 103(a) over Wachendorff et al. (US 6787567) have been fully considered and they are found persuasive.

5. The rejection of claims 1, 2, 11 and 14 made by the examiner under 35 USC 103(a) is **MAINTAINED** for the reasons of record in the office action mailed on 06/03/2009.

6. In regards to the 103(a) rejection, Applicant asserts the following:

A) A mixture of prothioconazole and trifloxystrobin would not have been obvious in view of Wachendorff, especially in the instantly claimed weight ratio.

7. In response to A, this is not found persuasive. It would have been obvious to pick and choose from the disclosed fungicides to arrive at a fungicidal combination exhibiting synergy wherein the composition comprises prothioconazole and trifloxystrobin. It's taught that prothioconazole and trifloxystrobin in addition to the lead acetamide compound can be combined into a final composition to inhibit fungi growth. It's *prima facie* obvious to combine compounds each of which are taught by the art to be useful for the same purpose, in order to form a new composition to be used for the very same purpose. The fact that Wachendorff teaches myriad of fungicides, this would not preclude an ordinary person from using it to arrive at the instantly claimed invention. Moreover Applicants composition is a comprising claim, so it is inclusive to unmentioned compounds which may or may not be fungicidally active. In regard to synergy, Wachendorff teaches a mathematical formula for making fungicidal compositions which will exhibit synergistic activity. See column 28. One would have been motivated to apply the mathematical formula to any mixture of fungicides in order to arrive at a mixture possessing synergistic effects. For instance, if one arrived at a composition comprising prothioconazole and another fungicide exemplified by Wachendorff, i.e. trifloxystrobin, at a ratio somewhere between 20:1 and 1:20 which exhibited synergistic properties, then this would not be a product of innovation, but rather one of common sense and ordinary skill.

Maintained Rejections, of Record
Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1, 2, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wachendorff-Neumann et al. (US 6787567; of record).

10. The teaching of Wachendorff-Neuman et al. ("Wachendorff") is drawn to fungicidally active compound combinations. It is disclosed that prothioconazole (compound XXI, see column 6, lines 5-10; see instant claims 1 and 2) and trifloxystrobin (compound XII, see column 4, lines 20-25; see instant claims 1 and 2) are fungicides which can be used in the active combination. It is taught that the active fungicidal compound combinations are present in a solid or liquid carrier (see column 26, lines 62-68; see instant claim 11). Wachendorff teaches that prothioconazole and trifloxystrobin can be included in a fungicidal composition, preferably from 0.2 to 20 parts by weight (see column 22, lines 50 and line 66: specifically groups 12 and 20; see instant claim 7).

11. Wachendorff fails to specifically use prothioconazole and trifloxystrobin together in a composition.

12. Regardless, it would have been obvious to one ordinarily skilled in the art at the time the invention was made to use and modify the teaching of Wachendorff with a reasonable expectation for success in arriving at a active fungicidal mixture wherein the mixture comprises prothioconazole and trifloxystrobin. Although the teaching of Wachendorff doesn't specifically teach using the compounds together, it would still have been obvious to combine them and arrive at a composition having the instant properties. According to the MPEP (2144.06), it is *prima facie* obvious to combine two compounds each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose. So

even though Wachendorff fails to use the two compounds together, the mere fact that both compounds are commonly used as fungicides, one of ordinary skill would have motivated to combine them with a reasonable expectation for success in arriving at a composition with the instantly claimed properties. Moreover, Wachendorff states that the amount each fungicidal component to be used in a composition ranges from 0.2 to 20 parts by weight which would result in a weight ratio of 1:1 to 100:1 (or 1:100) which covers the broad range claimed by Applicant. It is not considered inventive to optimize compositions (per weight ratio) especially when the conditions of such a composition are clearly suggested by the prior art. Therefore, a composition which comprises prothioconazole and trifloxystrobin at a weight ratio of 20:1 to 1:20 is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

New Rejections, Necessitated by Amendment
Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dutzmann et al. (WO 98/47367; of record, see IDS 08/24/2004), evidenced by English equivalent, US 6306850 (see IDS 08/24/2004) in view of Duvert et al. (WO 00/47047), evidenced by English equivalent, US 6797301.**

15. Dutzmann is directed to novel active combinations of prothioconazole and azoxystrobin (see Table 1, column 25). It's shown that combinations of prothioconazole and azoxystrobin possess synergistic benefit.

16. Dutzmann fails to teach the composition as consisting of prothioconazole and trifloxystrobin.

17. Duvert teaches that strobilurin fungicides like azoxystrobin and trifloxystrobin are functionally equivalent in their ability to inhibit mitochondrial respiration in fungi and causing them to die (see column 2, lines 35-35).

18. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Dutzmann with Duvert with a reasonable expectation for success in arriving at a composition consisting of prothioconazole and trifloxystrobin. It would have been within the purview of an ordinary person to use trifloxystrobin in place of azoxystrobin because both compounds are recognized in the art as having similar biological activities, i.e. inhibiting mitochondrial respiration. Therefore, the invention as a whole is *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in absence of evidence to the contrary.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

20. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyle A. Purdy whose telephone number is 571-270-3504. The examiner can normally be reached from 9AM to 5PM.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau, can be reached on 571-272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*/Kyle Purdy/
Examiner, Art Unit 1611
November 30, 2009*

*/David J Blanchard/
Primary Examiner, Art Unit 1643*